



**IDEM
Office of Air Management
Rules Guidance**

**November 1997
July 1998 (revised)**

Vanderburgh County Ozone Control Measures Amendments to Rules 326 IAC 8-4 and 326 IAC 8-10

FACT SHEET

Overview

This rulemaking amends certain air pollution control rules, covering gasoline vapor recovery during fueling operations and automobile refinishing, for reduction of ozone producing pollutants in Vanderburgh County, Indiana.

Citations Affected

Amends: 326 IAC 8-4
326 IAC 8-10

Affected County

Vanderburgh County

Potential Cost

The two control measures proposed in this rule making are cost-effective, simple to implement, and equitable. The use of vapor recovery equipment, in urban areas, has proven to be very effective in reducing ozone producing emissions. Vapor recovery equipment and High Volume Low Pressure (HVLP) spray guns are readily available and widely used. HVLP spray guns utilize relatively inexpensive technology that also significantly reduces wasted paint (ultimately reducing the operator's material costs).

Description

With the passage of the Clean Air Act Amendments (CAAA) in 1990, Vanderburgh County, Indiana, was designated a marginal nonattainment area for the pollutant ozone. In 1993, based on three years of monitored air quality that met the state and federal health standard for ozone, the Indiana Department of Environmental Management (the department) petitioned the United States Environmental Protection Agency (U. S. EPA) to redesignate the county to attainment status. The U.S.EPA final approved the designation of Vanderburgh County to attainment December 9, 1997 at 62 FR 64725.

The petition included a maintenance plan that examined expected growth in emissions from stationary, mobile and area sources, and concluded that air quality in the county would continue to meet health standards through the year 2006. U. S. EPA has also final approved the department's maintenance plan December 9, 1997 at 62 FR 64725.

The maintenance plan included a commitment to contingency measures, in the event that air quality exceeded or regularly approached the level of the standard during the maintenance period. The plan established two triggers for corrective action. The first trigger, called a “Level I Response,” occurs if a violation of the ozone standard is recorded in the Vanderburgh County air monitoring network.

The second trigger, known as a “Level II Response,” occurs either when emissions of volatile organic compounds (VOCs), nitrogen oxides (NO_x), or carbon monoxide (CO) increase above the levels anticipated in the maintenance plan or when the monitored levels of ozone exceed one hundred fifteen (115) parts per million (ppm) more than once in any year at any site in the affected area.

In 1995, four Evansville monitors recorded an ozone value greater than one hundred fifteen (115) ppm (values ranged from one hundred sixteen (116) to one hundred thirty one (131) ppm). One of those monitors also recorded a one-hundred-fifteen (115) ppm value. This does not formally trigger a Level II Response, but reflects the fact that ozone levels approach the health standard with some regularity in Vanderburgh County.

Furthermore, in July 1997, U.S. EPA issued a revised eight-hour standard for ozone. Though formal designations of attainment will not be made until 2000 (based on ozone readings from 1997-1999), current data indicate that the Evansville area does not meet the new standard.

There is considerable interest among local officials, citizens and businesses in the Vanderburgh County area to assure that ozone levels remain below the standard, with an adequate margin of safety for both the public health and to allow for economic growth. The department has been working with these stakeholders since 1995 in an effort to identify practical measures that could readily be implemented in Vanderburgh County to reduce emissions of VOCs and contribute to lowering ozone levels on hot summer days. Because Vanderburgh County was not designated nonattainment until 1990, several basic VOC control measures required in other nonattainment areas were never required to be implemented.

As the result of a local effort by interested citizens and businesses known as ACORN (Action Committee for Ozone Reduction Now) to study possible measures to reduce VOC emissions in Vanderburgh County, local city and county officials are moving forward with a four part reduction plan. The four measures recommended by ACORN are as follows:

- ◆ Use of low RVP gasoline during the ozone season.
- ◆ Controls at gas stations and tanker trucks that reduce emissions during unloading of gasoline.
- ◆ HVLP spray guns at, primarily, automobile refinishing operations.
- ◆ A Pollution Prevention Task Force to help companies identify areas where emission reductions can be achieved by substituting low or non-VOC materials.

City and county officials are proceeding with development of local ordinances for these measures.

The department believes that the efforts of ACORN and elected officials to identify ozone control measures that make sense for their community and reduce VOC emissions are preferable to state-mandated measures, or a plan developed largely by the department with input from local citizens and officials. The department is working with Vanderburgh County and Evansville officials in the implementation of these positive clean air measures. They are appropriate as contingency measures under the maintenance plan as well as in anticipation of the new eight-hour standard.

In order for any of these measures to become part of the State Implementation Plan (SIP) for Vanderburgh County and be formally included as contingency measures under the maintenance plan, they must be adopted into state rules and submitted to the U. S. EPA. The following VOC control measures are the two proposed contingency measures as part of this rulemaking.

1. Stage I Vapor Recovery

Since 1980, Indiana has required tank trucks that transport gasoline and gasoline stations to be equipped with emission recovery controls referred to as “Stage I Vapor Recovery” systems. This requirement applies throughout the state to gas stations built since January 1, 1980 and all stations in certain counties. Stage I requires that storage tanks at gas stations and transport trucks have and use devices that capture and recover gasoline vapors that would otherwise escape during the loading and unloading of fuel. This measure will require

that all gasoline stations in Vanderburgh County install and use Stage I equipment.

2. HVLP Spray Guns

HVLP spray guns are an efficient method of applying paint in certain industrial processes. They reduce emissions from the painting process and also reduce paint waste. In 1995, the board adopted a requirement that HVLP spray guns be used in automobile refinishing operations in Clark, Floyd, Lake and Porter Counties as part of the automobile refinishing rule, 326 IAC 8-10.

The department does not recommend moving forward with the low RVP fuel measure at this time. Fuel is supplied by the distributors, not on a county by county basis, but on a broader regional scale. To require low RVP fuel only in Vanderburgh County would be very difficult and costly, based on the distribution network. However, the Clean Air Act does not give IDEM the legal authority to require this type of fuel in attainment areas. In fact, it forbids it. IDEM believes that this measure, which would be effective in reducing emissions of ozone precursors, is more appropriately considered in the context of what is likely to be a regional approach to southwestern Indiana’s air quality issues under the revised ozone standard.

CONSIDERATION OF FACTORS OUTLINED IN INDIANA CODE 13-14-8-4

Indiana Code 13-14-8-4 requires that in adopting rules and establishing standards, the board shall take into account:

- 1) all existing physical conditions and the character of the area affected;
- 2) past, present, and probable future uses of the area, including the character of the uses of surrounding

- areas;
- 3) zoning classifications;
 - 4) the nature of the existing air quality or existing water quality as the case may be;
 - 5) technical feasibility, including the quality conditions that could be reasonably be achieved through coordinated control of all factors affecting the quality; and
 - 6) economic reasonableness of measuring or reducing any particular type of pollution.

Consistency with Federal Requirements

The amended rules are consistent with federal rules.

IDEM Contact

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